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CLAIMS

- Genes which code for glycosyl hydrolases having an HCA score with the fota-carrageenase of Alteromonas fortis which is greater than or equal to 65% over the domain extending between amino acids 164 and 311 of the protein sequence SEQ ID No. 2 of said iota-carrageenase.
 - Genes according to claim 1 wherein the HCA score is greater than or equal to 70%.
- Genes according to claim 1 wherein the HCA score is greater than or equal to 75%.
 - Gene according to claim 1 which codes for the 1-carrageenase of Alteromonas fortis and comprises the nucleic acid sequence SEQ ID No. 1.
 - 5. Genes which code for glycosyl hydrolases having an HCA score with the kappa-carrageenase of Alteromonas carrageenovora which is greater than or equal to 75% over the domain extending between amino acids 117 and 262 of the protein sequence SEQ ID No. 6 of said kappa-carrageenase.
- Genes according to claim 5 wherein the HCA score is greater than or equal to 80%.
- Genes according to claim 5 wherein the HCA score is greater than or equal
 to 85%.
 - 8. Gene according to claim 5 which codes for the κ-carrageenase of Cytophaga drobachiensis and comprises the nucleic acid sequence SEQ ID No. 7.
 - Use of the genes according to any one of claims 1 to 8 for obtaining glycosyl hydrolases by genetic engineering.
- 25 10. Use of the gene according to claim 4 for obtaining the iota-carrageenase of Alteromonas fortis by genetic engineering.
 - 11. Use of the gene according to claim 8 for obtaining the kappa-carrageenase of *Cytophaga drobachiensis* by genetic engineering.